

THE WHITE-LETTER HAIRSTREAK: *STRYMONIDIA W-ALBUM* KNOCH

By A. ARCHER-LOCK*

Further to my brief article (Vol. 92, No. 10, page 254), I received quite a number of most valuable comments which are summarised as follows:—

Current Situation. The North of England would seem to hold much the strongest position. Mr. S. M. Jackson considers the butterfly still to be widespread in Yorkshire except for the North West of that County, and believes that a spread may have occurred. Mr. J. Briggs knows of a strong colony in North Lancashire, commenting that this could be a recent development. Moving further South, Mr. John Payne found that the species was still hanging on in Northamptonshire even in elm-disease ravaged areas, while Mr. Jack Green knew of a good colony in Worcestershire where he considers that the butterfly can still quite readily be found. In Breconshire, Mr. J. P. Sankey-Barker has continuing records of one flourishing colony based apparently upon surviving elm saplings. Several correspondents from the Bath area, once renowned for this hairstreak, commented on a catastrophic almost total decline, including Mr. Bryan Moore, the recorder of lepidoptera for the Bath Natural History Society. Mr. Matthew Oates, who wrote a particularly entertaining and detailed letter, considers that Sussex has suffered very severely as early as 1976, and in Hampshire, twenty colonies of which he knew, are reduced to two.

Practically all the many letters refer to an abundance of *Strymonidia w-album* in 1976.

New Colonisation. There is a tenuous suggestion of a drift northwards: possibly a retreat before the advancing elm disease? Several correspondents confirm that the species wanders. Mr. Oates found two in separate pub bars in Sussex — perhaps here lies the true explanation of decline. Mr. Sankey-Barker has records of ten new sites discovered in the last five years although pointing out that they may have existed before, whilst Mr. Jackson similarly has further localities in North Yorkshire.

Elm Disease. Opinion is certainly divided as to whether this is the over-riding factor for decline. Mr. Green can find no other explanation, but there are several reports of the butterfly carrying on through the advent of elm suckers springing up. The well known seasonal fluctuation is frequently confirmed, Mr. Sankey-Barker pointing out the series of indifferent middle summers since 1976. The Cornish locality to which I originally referred has suffered no further visible elm decline, and yet two long watches at the 'master' wych elm yielded not a single sighting compared with many in 1980.

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However, I did see two widely separated specimens at the tops of elms over a stretch of half a mile in this valley.

Common Elm (Ulmus procera). There is no doubt that this butterfly will breed quite readily on this tree. Mr. Green has found larvae there, and so has Mr. Payne, even on very diseased trees, whilst Dr. D. F. Owen found them on the species within the City of Oxford.

Blossom Feeding. Most correspondents confirm frequent visits to privet, bramble, thistles, and less often to hemp agrimony, ragwort, hogweed, knapweed, and even garden flowers including buddleia, which suggests that butterflies in the South West do behave differently — perhaps due to a greater abundance of honey-dew. In 1976, Dr. Owen saw hundreds on bramble flowers in Berkshire. A seasonal shortage of honey-dew may well explain these occurrences which are reported occasionally.

The conclusion to draw must be that the White-letter Hairstreak will survive, even if one has misgivings when the *Morning Telegraph* (7/8/81) reports that Dutch Elm Disease has hit the Barnsley area hard in 1981 with more than 1,000 trees affected, and a sudden upsurge was also reported in the Edinburgh green belt (*Guardian* 25/8/81). The National loss is now put at twelve million trees.

May I thank all those who have written to me, taking such considerable trouble, and also those who have spoken to me on this subject. Obviously, I have failed to do justice to any of them, but mentioned or not, I am most grateful for their help towards a brief summary record of the current state of this often elusive butterfly.

THE PUPATION OF ANTHOCHARIS. — The beak on the pupa of *Anthocharis cardamines*, to which Lt. Col. C. A. Cowan draws attention in his paper under the above title (1981, *Ent. Rec.*, 93: 97-99), is by no means unique in the family. A rather less pronounced beak is present in the pupa of *Leptidea sinapis*, and there are many examples among the tropical and semi-tropical Pieridae. Plate 2 in Talbot's *Fauna of British India*, i (2nd edit.), figures three species *Colotis eucharis* F. (wrongly captioned as *danae*), *Ixias marianne* Cr. and *Valeria ceylanica* Feld., whilst my photographs of East African early stages, now in the British Museum (Natural History) include a number of other species.

I do not think that Lt. Col. Cowan's suggestion of the purpose of the beak can be the correct one, as most of the Indian and African species that possess it are generally not more than a fortnight in the pupal state. Generally speaking, it would appear that those pupae that are supported by a comparatively long girdle have a beak, whilst those that are appressed against their substrate do not.

The distorted beak in Lt. Col. Cowan's fig. 9 is almost certainly the result of injury when the pupa was newly formed and soft. — D. G. SEVASTOPULO, F.R.E.S., P.O.Box 95617, Mombasa (Nyali), Kenya.